(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 21 December 2000 (21.12.2000)

(10) International Publication Number WO 00/76309 A3

- C12N 15/00, (51) International Patent Classification?: A01K 67/027, A61K 38/17, 39/395 // C07K 14/745, A61P 9/00
- (21) International Application Number: PCT/EP00/05318
- 8 June 2000 (08.06.2000) (22) International Filing Date:
- (25) Filing Language:
- (26) Publication Language:

English

English

(30) Priority Data: 99201859.8

10 June 1999 (10.06.1999)

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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- (88) Date of publication of the international search report: 19 April 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NON-HUMAN TRANSGENIC ANIMALS DEFICIENT IN GAS6 FUNCTION AND THEIR USE

(57) Abstract: It has been shown that Gas6 deficient endothelial cells are resistant to activation by endotoxin and TNF-a in vitro and in vivo and that leukocytes did not or much less extravasate in Gas6 deficient mice. The present invention also relates to the manufacture of a medicament for the treatment of endothelial dysfunction. The present invention further relates to the use of an inhibitor of the Gas6 function and/or an inhibitor of a Gas6 receptor for the manufacture of said medicament.

A. CLASSIFI	CATION OF SUBJECT MATTER	A61K30/305 //C07	V14/745	
IPC 7 C12N15/00 A01K67/027 A61K38/17 A61K39/395 //C07K14/745, A61P9/00				
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Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N A01K A61K				
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Electronic data base consulted during the International search (name of data base and, where practical, search terms used)				
PAJ, BIOSIS, WPI Data, EPO-Internal, MEDLINE, CHEM ABS Data				
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C. DOCUME	NTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the rete	vant passages	Relevant to claim No.	
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 04, 30 April 1999 (1999-04-30) -& JP 11 000079 A (SHIONOGI & 6 January 1999 (1999-01-06) abstract	CO LTD),	1-4	
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Further documents are listed in the continuation of box C. Patent family members are listed in annex.				
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed or priority date and not in concided to understand the priority dicted to understand the priority document of particular relevance cannot be considered novel involve an inventive step who document of particular relevance cannot be considered to involve an inventive step who document is combined with the considered to inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document is combined with the priority date claimed cannot be considered to inventive step who document of particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an inventive step who document or particular relevance cannot be considered novel involve an involve an involv		 "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the do "Y" document of particular relevance; the cannot be considered to involve an in	ict with the application but le or theory underlying the le; the claimed invention cannot be considered to the document is taken alone le; the claimed invention le an inventive step when the le or more other such docu- g obvious to a person skilled patent family	
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL ~ 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Devijver, K		

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	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FRIDELL YIH-WOEI C ET AL: "GAS6 induces Ax1-mediated chemotaxis of vascular smooth muscle cells." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 273, no. 12, 20 March 1998 (1998-03-20), pages 7123-7126, XP002154999 ISSN: 0021-9258 cited in the application page 7125, right-hand column page 7126, right-hand column abstract	5,6,8,9
X	NAKANO TORU ET AL: "Requirement of gamma-carboxyglutamic acid residues for the biological activity of Gas6: Contribution of endogenous Gas6 to the proliferation of vascular smooth muscle cells." BIOCHEMICAL JOURNAL, vol. 323, no. 2, 1997, pages 387-392, XP002155000 ISSN: 0264-6021 cited in the application page 389, right-hand column, paragraph 1 page 390, right-hand column, paragraph 3	5,7,10
X	O'DONNELL KRISTY ET AL: "Expression of receptor tyrosine kinase Axl and its ligand Gas6 in rheumatoid arthritis: Evidence for a novel endothelial cell survival pathway." AMERICAN JOURNAL OF PATHOLOGY, vol. 154, no. 4, April 1999 (1999-04), pages 1171-1180, XP000971169 ISSN: 0002-9440 abstract; figure 5	5,7-9
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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-4

Non-human transgenic animal deficient in Gas6 function and its use.

2. Claims: 10; in part: 5-7

Use of an inhibitor of the Gas6 function for the manufacture of a medicament.

3. Claims: 8,9; in part: 5-7

Use of an inhibitor of a Gas6 receptor for the manufacture of a medicament.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: in part: 5-8

Claims 5-8 refer to an inhibitor of the Gas6 function and/or an inhibitor of a Gas6 receptor without giving a true technical characterization. Moreover, no such specific inhibitors are defined in the application. In consequence, the scope of said claims is ambiguous and vague, and its subject-matter is not sufficiently disclosed and supported (Art. 5 and 6 PCT).

No complete search can be carried out for such purely speculative claims whose wording is, in fact, a mere recitation of the result to be achieved.

Therefore, the search was limited to inhibitors which are either a soluble form of the AXL, MER or RSE receptor or a Gas6 antibody.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT Information patent family members

Interpolication No PC 00/05318

Patent family member(s) Publicati n Patent document Publication cited in search report date date NONE JP 11000079 Α 06-01-1999